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09/668,105	09/22/2000	Chen Feng	TELNP215US	9584

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EXAMINER

SHAFFER, RICKY D

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/668,105

Applicant(s)

FENG

Examiner

Ricky D. Shafer

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6-16 and 19-44 is/are pending in the application.
- 4a) Of the above claim(s) 6-16, 19-21, 23, 24, 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22, 25-31 and 34-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/21/03 has been entered.

2. Newly presented claims 32 and 33 are drawn to nonelected species "C", depicted by Fig. 5B. Accordingly, claims 32 and 33 are withdrawn from consideration as being directed to a non-elected species. See 37 CFR 1.142(b) and MPEP § 821.03.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 22, 26-30, 38, 39 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Shepard ('711).

Shepard discloses an optical assembly comprising a housing (19,20) having an opening (26) for receiving light information, an image sensor (42) having an aperture (56), wherein the image sensor is located within the housing and operative to sense light entering the aperture, and a prism (22) mounted onto the aperture (via element 36) of the image sensor to receive light from

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the opening along a first path (62) and to provide at least a portion of the received light to the aperture along a second path. Note figures 1-4 and the associated description thereof.

5. Claims 22, 26-31, 36, 38, 39 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogura et al (560).

Ogura et al discloses an optical assembly comprising a housing (72, 73) having an opening (60), which serves as a window, for receiving light information from an dataform (object), an image sensor (2) <sup>(7,2)</sup> having an aperture (901), wherein the image sensor is located within the housing and operative to sense light entering the aperture, a prism (G4,65) mounted onto the aperture of the image sensor to receive light from the opening along a first path (64) and to provide at least a portion of the received light to the aperture along a second path and a lens (60, 61, 62, or 63) mounted within the housing along the first path. Note by example only, figures 8, 9, 11 and 23 and the associated description thereof.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 25, 34, 35, 37, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al (560).

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Ogura et al discloses all of the subject matter claimed, note the above explanation, except for explicitly stating that the circuit board (1) is a printed circuit board.

It is well known to use printed circuit boards in an analogous for the purpose of electrically and structurally connecting circuits.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the circuit board of Ogura et al to include a printed circuit board in order to reduce hard wiring, the loss or displacement of electrical connecting leads as well as the reduction of manufacturing costs.

As to the limitations of claims 25, 40 and 44, it is well known to use a low loss transparent adhesive in the same field of endeavor for the purpose of bonding an optical element to another element.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the adhesive of Ogura et al to include a low loss transparent adhesive, as is commonly used and employed in the optical art, in order to adhere the prism to the aperture of the image sensor without the loss of light information.

As to the limitations of claim 37, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the dataform (object) of Ogura et al to include a bar code adjacent the opening of the optical assembly in order to read and/or process the light information therefrom, since it is well known in the art that a bar code is one form of typical dataforms.

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8. Claims 22 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al ('287).

Taniguchi et al discloses an optical device for a bar code reader comprising an image sensor (15), wherein the image sensor is operative to sense light, and a prism (22) mounted onto the image sensor and adapted to receive light along a first path (17) and to provide at least a portion of the received light to the image sensor along a second path (SP), note Fig. 1 and the associated description thereof, except for the image sensor having an aperture.

It is well known to use an aperture, adjacent an image sensor, in the same field of endeavor for the purpose of controlling or regulating the amount of light detected by the image sensor.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the image sensor of Taniguchi et al to include an aperture, as is commonly used and employed in the art, in order to control or regulate the amount of light being detected so such as to eliminate undesirable light from entering said image sensor.

9. Claims 26, 27 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al ('287) as applied to claims 22 and 43 above, and further in view of Taniguchi ('389).

Taniguchi et al discloses all of the subject matter claimed, note the above explanation, except for a housing having an opening with a window coupled to the opening of the housing.

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Taniguchi teaches it is well known to use a housing (113) having an opening with a window coupled to the opening of the housing in the same field of endeavor for the inherent purpose of protecting an optical device from dust and other environmental conditions.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical device of Taniguchi et al to include a housing having an opening with a window coupled to the opening of the housing, as taught by Taniguchi in order to protect the optical device from dust and other environmental conditions.

10. The drawings are objected to because element 326, disclosed on page 10 of the specification, has not been illustrated. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

11. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the lens mounted within the housing along the first path and the low loss transparent adhesive must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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12. Any inquiry concerning this communication should be directed to R.D. Shafer at telephone number (703) 308-4813.

RDS

May 2, 2003

*Ricky D. Shafer*  
RICKY D. SHAFER  
PATENT EXAMINER  
ART UNIT 2872